

REMARKS

The Office Action of November 6, 2003 has been reviewed, and the Examiner's comments carefully considered.

Claims 44-81 are currently pending in this application. Claim 53 has been amended. Claims 82-88 are newly added. Therefore, claims 44-88 remain in this application.

Claim 53 has been rewritten in dependent form so as to depend from independent claim 44.

The Examiner has stated that claim 58-64 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Thus, Applicant's new independent claim 82 has been written to incorporate all of the limitations of original claims 53 and 58. Claims 83-88 correspond to further allowed claims 59-64, respectively.

Support for all amendments to the claims can be found in the specification and drawings as originally filed. No new subject matter is believed to have been added by this Amendment.

35 U.S.C. §§ 102(b) and 103(a) Rejections:

Claims 44, 45, 48-52, and 73-78 stand rejected under 35 U.S.C. § 102(b) for anticipation by U.S. Patent No. 4,235,144 to Lubow et al. (hereinafter "the Lubow patent"). Claims 46, 47, 53, 57, 65, 66, 71, 72, and 79 stand rejected under 35 U.S.C. § 103(a) for obviousness from the teachings of the Lubow et al. patent in view of U.S. Patent No. 5,025,704 to Davis (hereinafter "the Davis patent"). Claims 80-81 stand rejected under 35

U.S.C. § 103(a) for obviousness over the Lubow patent in view of U.S. Patent No. 5,700,966 to LaMarra (hereinafter “the LaMarra patent”).

The Lubow patent fails to disclose “a conductive tip protruding just beyond an edge of said plucking portion, an outer surface of said tip being sized so as to fleetingly contact a string of said instrument when said string is plucked by said plucking portion” as defined in claim 44 of the present application.

The prior art pick, shown for example in FIG. 3 and discussed at column 5, lines 15 to 20 of the Lubow patent, has a conductive first portion 60 and a non-conductive second portion 62. It is apparent from FIG. 3 of the Lubow patent that the size of the conductive portion 60 is approximately equal to that of the non-conductive portion. The conductive portion 60 does not protrude “just beyond an edge of said plucking portion” as defined in claim 44. Similarly, the conductive portion is not “sized so as to fleetingly contact a string of said instrument when said string is plucked by said plucking portion.” Rather, the conductive portion is sized so as to rest against the string immediately prior to plucking. This is consistent with the statement at column 3, lines 2 to 6 that “a means is provided for sensing the breaking of contact between the pick means and a string on the instrument, this contact breaking being used to activate a special musical effect means.”

As described at column 5, lines 20 to 30 of the Lubow patent, the musician may choose whether or not to initiate a “special musical effect” by selectively orienting the pick so as to strum the guitar strings using either the conductive portion 60 or the non-conductive portion 62. If the musician decides to initiate the special musical effect, the musician orients the pick such that the conductive portion 60 is used to pick the string 12.

The functioning and some inherent limitations of the system disclosed in the Lubow patent are discussed under the heading "Background to the Invention" at page 1, line 26 to page 2, line 23 of the present patent specification. More particularly, the method of triggering in the Lubow patent is based upon the breaking of contact, which has numerous disadvantages. For example, the conductive contact between the string and the pick disclosed in the Lubow patent may be imperfect, leading to false triggering. This may be due to tarnishing of the strings, vibration of the strings, insufficient or inconsistent pressure of the pick against the strings, etc.

In contrast, the geometry of the non-conductive body and the barely exposed conductive tip as defined in claim 44 of the present application allows for operative association of the plectrum with electronic monitoring circuitry adapted to provide a triggering signal each time the tip *contacts* any one of the strings (as opposed to *breaking contact* as in the Lubow patent). This advantageously allows the preferred embodiment of the present invention to overcome or ameliorate at least one of the disadvantages of the system disclosed in the Lubow patent and thereby provide far more reliable triggering.

Some of the essential differences in the functioning of the pick in the Lubow patent as compared to a preferred embodiment of the present invention can be most clearly described with reference to a single plucking cycle. In the system of the Lubow patent, the conductive portion 60 of the pick is firstly placed against a string, causing conductive contact therebetween and potentially causing false triggering due to relatively prolonged imperfect conductive contact. The pick is then moved relative to the string until the string slips off the end of the pick, thereby breaking electrical contact and causing a triggering signal to be generated. Hence, while the prior art pick is in contact with the string, it is only the

conductive portion 60 that typically makes contact with the string (assuming that the musician has oriented the pick so as to initiate the special musical effect). Alternatively, if the musician has oriented the pick so as not to initiate the special musical effect, then it is only the non-conductive portion 62 that typically contacts the string throughout the whole plucking cycle. In contrast, a plucking cycle of a preferred embodiment of the present invention is best shown in FIGS. 5A to 5F of the present patent application. Prior to plucking, the non-conductive body 5 rests against the string 10, as shown in FIGS. 5B and 5C. During this stage the tip 8 of the preferred embodiment of the present invention is not in contact with the string 10, therefore avoiding false triggering. It is substantially only at the instantaneous moment depicted in FIG. 5D that the tip 8 makes conductive contact with the string 10, thereby initiating the triggering signal an instantaneous moment before the string is plucked, as described at page 7, lines 7 to 17. In other words, in one plucking cycle of the preferred embodiment of the present invention, firstly the non-conductive body, then the conductive tip, make contact with the string.

Applicant respectfully refers the Examiner to the International Preliminary Examination Report for the corresponding PCT application in which the relevance of the Lubow patent in relation to original claim 1, now claim 44, was discussed. The PCT Examiner specifically referred to the design of the conductive tip (i.e. "sized so as to fleetingly contact a string") of the plectrum as differing "markedly" from the plectrum disclosed in the Lubow patent. Applicant submits that this provides further persuasive evidence in favor of the patentability of the invention as defined in claim 44.

For the foregoing reasons, independent claim 44 is patentable over the Ludlow et al. patent, either alone or in combination with the Davis patent and/or the LaMarra patent.

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Claims 45-52, amended claim 53, and claims 54-81 dependent from and adding further limitations to independent claim 44 and are believed to be patentable for at least the same reason independent claim 44 is patentable.

New independent claim 82 is patentable because it has been written to incorporate all of the limitations of original claims 53 and 58. New claims 83-88 correspond to further allowed claims 59-64, respectively, and therefore are also patentable.

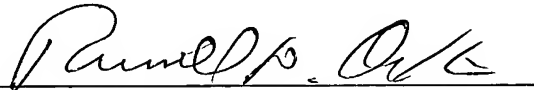
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CONCLUSION

In view of the foregoing, claims 44-88 are in condition for allowance. Reconsideration of the Examiner's rejections and objections and allowance of the aforementioned claims are respectfully requested.

Respectfully submitted,

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